



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

✓

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/077,628 | 02/19/2002 | Richard W. Morris | N2000-017 | 2866 |
| 7590 | 04/06/2004 | | EXAMINER | |
| Joseph C. Spadacene Westinghouse Electric Company LLC 4350 Northern Pike Monroeville, PA 15146 | | | MCCAMEY, ANN M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2833 | |

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|--------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/077,628 | MORRIS, RICHARD W. |
| | Examiner | Art Unit |
| | Ann M McCamey | 2833 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 10 February 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-12 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-12 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/10/04 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation that the thickness of the first end is "about" the thickness of the second end. Although the term "about" does not automatically render a claim indefinite, in this case, the scope of the claim is unclear, since the scope is neither defined in the claim or in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6, 7, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Dale et al. (US 4,618,198).

Regarding claim 1, Dale et al. disclose an electrical connector (Fig. 4) that detachably connects a cable CL having a metal sheath 26 enclosing a first conductor 21, 22, to a second conductor, 23, 24 (Fig. 11) comprising:

a first elongated, tubular, metal housing section (34 and 89) having an integral longitudinal portion extending from a first end to a second end, the first end having a diameter defining a first peripheral surface and having a thickness, the second end having a larger diameter defining a second peripheral surface, with an intermediate part extending between the first peripheral surface and the second peripheral surface and having a thickness that is about the thickness of the first end, with the diameter at the first end sized to closely receive and prepared to be metallurgically joined to the sheath of the cable carrying the first conductor;

a second elongated, tubular, metal housing section 42 having a first end which is sized to mate with the second end of the first housing section, the second end of the first housing section and the first end of the second housing section having abutting surfaces (at 81) that are prepared to be mechanically or metallurgically joined, and said

second housing section having a second end 43 that is formed to be detachably connected to a mating second electrical connector; and

an elongated, electrically conductive pin 31, supported by the second housing section, having a first end designed to electrically connect with the first conductor and a second end that is formed to electrically interface with a complementary electrically conductive pin on a second electrical connector that is electrically connected to the second conductor.

Regarding the amended language that recites that first housing section is "integral," "integral" does not necessarily require a one piece or monolithic construction, and features 34 and 89 of Dale et al. anticipate the limitation.

Regarding the amended language that recites that the thickness of the two ends of the housing section having "about" the same thicknesses, "about" is interpreted broadly, since the term renders that claim indefinite. Thus, feature 34 alone also anticipates the limitations drawn toward the metal housing.

Regarding claim 2, Dale et al. disclose the first end of the first housing section being constructed to be brazed to the sheath of the cable.

Regarding claim 3, Dale et al. disclose a mating lap joint (at 81) being formed between the second end of the first housing section and the first end of the second housing section.

Regarding claim 4, Dale et al. disclose the mating lap joint being constructed to be brazed.

Regarding claim 6, Dale et al. disclose the first electrical conductor comprising two electrical leads that are insulated from one another and the electrically conductive pin comprises two parallel, elongated terminals with the first end of each terminal is constructed to connect a corresponding one of said electrical leads and the second end of each terminal is constructed to mate with a corresponding terminal on the second electrical connector.

Regarding claim 7, Dale et al. disclose an opening in the sheath of the cable through which the first conductor extends being filled with epoxy (Column 3, Lines 45-64).

Regarding claim 11, Dale et al. disclose the electrically conductive pin supported by the second end of the second housing section.

Regarding claim 12, Reinhart et al. disclose the first end of the electrically conductive pin being a crimp bucket.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dale et al. in view of Linden et al. (US 5,785,544).

Reinhart et al. disclose the invention substantially as claimed, but do not disclose the connection between the first and second housing sections being a threaded joint. Linden et al. teach a threaded joint for joining two metal housing sections together to establish a hermetic seal. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connector of Reinhart et al. with a threaded joint to eliminate the extra brazing or soldering step.

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dale et al. in view of Reinhart et al. (US 4,691,080)

Regarding claims 8 and 15, Dale et al. disclose the invention substantially as claimed, but do not disclose an electrical insulator spacer positioned between the sheath and the elongated, electrically conductive pin. Reinhart et al. teach an insulator spacer 18. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include an insulator spacer in the connector of Dale et al. to guide the conductors while preventing electrical contact between the conductors.

Regarding claim 9, Reinhart et al. disclose the electrical insulator includes a passage 66 through which the first conductor can be threaded.

Regarding claim 10, Reinhart et al. disclose the electrical insulator being a ceramic plate (Column 2, Line 64).

Art Unit: 2833

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann M McCamey whose telephone number is (571) 272-2010. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 ex. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AMM
April 1, 2004



RENEE LUEBKE
PRIMARY EXAMINER